Outage Management System Implementation

Status Report

OVERVIEW

Fitchburg Gas and Electric Light Company d/b/a Unitil ("Unitil" or "the Company") is submitting this status report to the Massachusetts Department of Public Utilities ("DPU") on its progress regarding the implementation of the last item to be completed as part of the "December 2008 Ice Storm Self Assessment Report" ("Report"), Item #8 OMS Acquisition, Development, and Staffing.

This document outlines the overall status for the Outage Management System (OMS) Implementation. The OMS being implemented by Unitil is a 3rd party product developed by ABB. As part of the ABB implementation, reporting is accomplished using Obvient Solutions.

APPROACH

Unitil has taken multiple steps to facilitate an accelerated, yet thorough implementation of the OMS.

Single Vendor Point of Contact – Multiple vendors are used for hardware purchases, software purchases, and reporting. As part of the agreement reached with ABB, all hardware purchases, software purchases, and reporting purchases are facilitated through ABB, with final cost and approval coming from Unitil.

Single Vendor Licensing – Multiple license agreements are required for the implementation of the OMS (i.e., Oracle, TIBCO, Obvient, etc). As part of the agreement reached with ABB, all software licensing related to the OMS are facilitated by ABB, with final cost and approval coming from Unitil.

Two-Pronged testing approach – Unitil has partnered with ABB to divide testing into two parts, Factory Acceptance Testing (FAT) - Completed on-site at the ABB Sugarland, TX site, and Site Acceptance Testing (SAT) – completed once the system is installed in the Unitil offices. This allows for the best use of resources, time, and facilities, giving Unitil the opportunity to validate hardware/software, system configuration and integration among systems before introducing the OMS to the Unitil network environment.

Centralized Project Management – Unitil has assigned a Centralized Project Manager for the OMS implementation. ABB has also assigned a single project manager who works closely with Unitil's project manager. This ensures that all communication with the Vendor comes from a single point. This also gives Unitil's Executive Management a single point of contact for updates on project status and schedule.

The Centralized Project Manager works with the OMS project steering committee to facilitate approval of project milestones, and any major project changes.

HARDWARE/SOFTWARE

Hardware – The OMS system consists of 11 servers, 7 for the production environment, and 4 for the QA/Test environment, 3 switches, an external storage array, and redundant power for each of the 3 server racks. The system hardware is designed for full redundancy in the event of a component failure.

Software – 5 of the servers have Windows Server operating systems, and 6 servers have a Linux operating system. This is required to support the various software

programs. The ABB OMS system is installed, TIBCO middleware is used, and Obvient reporting solutions is installed.

Status – As previously reported, the Factory Acceptance Test has been completed. All OMS hardware/software was received at Unitil on 12/2/09, with the production hardware residing at one site and QA/Test hardware residing at an alternate site. Unitil decided to separate the location of these two environments for security in the event that one facility is compromised (i.e. fire). An initial delivery inventory and verification of the hardware was completed on 12/11/09.

NETWORK UPGRADES

As reported previously, Unitil contracted a network consulting firm to evaluate the Unitil network. The goal of this evaluation was to identify modifications that could be made to Unitil's computer network to: 1) improve reliability, 2) improve the customer experience with the IVR system, 3) ensure systems are current and on a regular refresh schedule, 4) ensure systems will support projected network growth, and 5) ensure adequate support is in place for all systems. As it relates to the OMS, this evaluation considered connectivity between the Interactive Voice Response (IVR) hardware and the OMS hardware. Additionally, OMS requirements for latency and bandwidth over the WAN were evaluated.

Status – The report containing recommended improvements for the network has been received by Executive Management and is being evaluated for costing and scheduling. After an initial review, the improvements required for the OMS implementation are targeted for completion in late January/early February 2010.

INTEGRATION

For the implementation of the OMS, there will be electric network data supplied from the Geographic Information System (GIS) and the Customer Information Systems (CIS). This information will be supplied in the form of an extract file from these source systems on a routine basis. The extract from the GIS will be loaded on a bi-monthly or monthly basis. The extract from the CIS will be loaded on a nightly basis.

The OMS will be fully integrated with the IVR allowing two-way communication between these systems. This communication takes place via an Application Program Interface (API). The API being used for this integration is MultiSpeak compliant. (NRECA's MultiSpeak® Specification is an industry-wide software standard that facilitates interoperability of diverse business and automation applications used in electric utilities. It has been developed and is maintained by the MultiSpeak Initiative.)

Status – Unitil has been regularly providing ABB with GIS information for development of the GIS extract process. As part of the FAT, Unitil was able to use, interact and test the electric network extract from GIS. The GIS extract process is complete. Unitil has been regularly providing ABB with CIS information that comes from the Unitil developed CIS extract process. The CIS extract process will be implemented into production at the same time the OMS is implemented.

Additionally, as part of the FAT, a connectivity test was successfully completed with the IVR vendor (Milsoft). Communication was established between ABB and Milsoft.

Outage and restoration information was communicated back and forth between the systems and simulated customer callbacks were successfully initiated.

REPORTING

Reporting for the OMS is accomplished using the Obvient Solution. This solution provides for internal dashboard reporting of "live" outage information, user developed reporting via a GUI interface, ORP reporting, and customer facing web reporting via the Storm Central module of Obvient. Additionally, as part of the implementation all historical data will be converted and will be available via Obvient.

Status – As part of the FAT, Unitil was able to use dashboard reporting, and view "live" outage reporting. All historical data has been converted and is scheduled to be loaded the first week of January 2010. Configuration of the web reporting Storm Central module is currently underway and is targeted for completion by the end of January 2010. Unitil employees have received training on historical report development and are currently developing the required historical reports to replace Unitil's existing Trouble Interruption Reporting system.

TESTING

As outlined above, the testing is divided into two parts: Factory Acceptance Testing (FAT) and Site Acceptance Testing (SAT). As previously reported, FAT has been completed. This testing included interactive use of the OMS and a comprehensive test of the OMS functionality using Unitil data. The SAT will include functionality testing, comprehensive IVR testing, and a comprehensive report verification process. As part of the SAT, Unitil plans to conduct a stress test of the system using the IVR call data that was captured during the 2008 Ice Storm.

Status – Approval of the FAT test results was given on 11/20/09. Planning is underway for the SAT. Test plan, cases, and procedures are being finalized with SAT targeted for the end of February 2010.

TRAINING

Training for the use and administration of the OMS is being provided as part of the agreement with ABB. Training is divided into Overview training, Operator training, Report training, and System Administration. Unitil will ensure that individuals are properly trained whose storm assignment requires them to operate or interact with the OMS system.

Status – The Overview training was completed on 11/19/09. The Report training, including dashboards, report creation, and report system administration was completed the week of 12/14/09 (3 days of training). The initial operator training is targeted for late January 2010. OMS system administration training is targeted for early February 2010.

IMPLEMENTATION

The implementation of OMS is a parallel implementation. This means that all existing processes will be kept in place as a familiarization process takes place. As a comfort

level with new processes is achieved, old process will be decommissioned, with complete decommissioning of old processes to be completed by the end of 2010. The goal with this type of implementation is zero impact to the customer.

Status – OMS is targeted to go live in March 2010.